

# Born out of wedlock at the river Waal. Illegitimacy in the city of Nijmegen, the Netherlands, 1811-1850

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PAUL PUSCHMANN & TIM RISWICK [eds.]

# BUILDING BRIDGES



## *Scholars, History and Historical Demography*

**A Festschrift in Honor of Professor Theo Engelen**

**Valkhof Pers**

NYNKE VAN DEN BOOMEN &amp; PAUL PUSCHMANN

## Born out of wedlock at the river Waal

*Illegitimacy in the city of Nijmegen, the Netherlands,  
1811-1850.*

### INTRODUCTION

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On 7 December 1827 retired sergeant-major Daniel Grimberg, now working as a tavern keeper in Nijmegen, declared to the civil registrar that, aged 60, he had become father to a son, Johannes. The mother of the child Theodora Derksen, 39 years of age, had already borne him two other children before Johannes: a son, Daniel, born in 1813 and a daughter, Elisabeth, born in 1819.<sup>1</sup> In Johannes' birth record, the civil servant wrote "*buitenecht*" after the names of his parents; this is an abbreviated form of the Dutch word "*buitenechtelijk*", out of wedlock. This was due to the fact that even though Daniel and Theodora were listed as married in the Nijmegen population register and lived together as husband and wife, they had never actually been married.

In this paper, we will readdress data we once collected as students for a seminar on nuptiality and a subsequent master's thesis on a similar subject (Van den Boomen & Puschmann, 2005; Van den Boomen, 2010). The seminar, which took place in the autumn of 2005, was intended to show us fledgling historical demographers how the eternal Malthusian tension between population growth and food supply, typical of pre-industrial societies, was regulated by marriage behavior in the Netherlands during the nineteenth century. Under the inspiring leadership of Theo Engelen, we set out to explore aspects of nineteenth-century courtship and marriage in the city of Nijmegen on the basis of local archival records, after having received a thorough introduction into the scientific literature on marriage and fertility.

We learned that the men and women of nineteenth-century Nijmegen, like their peers in other Western European countries, married late, and

that a considerable proportion of them remained celibate for life (cf. Engelen, 2006; 2014); thus identifying the main features of the so-called Western European marriage pattern, a concept coined by John Hajnal (1965). Low nuptiality was mainly caused by neo-locality, meaning that newly-wed couples were supposed to form a new household, away from their parents. Whereas most people did not obtain sufficient resources for this until later stages in life, some never reached the necessary economic independence to establish their own household and remained unmarried their whole lives. The rules of household formation that individual couples followed at the micro-level had considerable economic and demographic consequences at the macro-level: fertility and population growth were evenly balanced to economic growth (Engelen, 2005; Engelen & Wolf, 2005); a phenomenon Thomas Malthus (1798) had already outlined in his 'Essay on the Principle of Population'. In Malthus' view, limiting a woman's fecund years through marriage restrictions, or preventive checks, was a means of averting positive population checks whereby population growth was balanced out by high mortality due to wars, famines and diseases. However, the only way for preventive checks to be effective in an era without adequate contraceptive measures was for sexual activity to be limited to married couples.

Before long, we were both fascinated by the people who for some reason had chosen to violate the sexual norms of society in that time, a violation made manifest by the birth of one or more illegitimate children, and decided to focus our efforts on their stories.<sup>2</sup> Just like Malthus, contemporary authorities feared that extra-marital fertility would lead to poverty and chaos and therefore tried to control it. The civil registry, introduced in Nijmegen by the French in 1811, gave them an efficient bureaucratic tool for meticulously keeping track of all children born out of wedlock, and of their parents, who had committed the sin of extra-marital sexuality. These same records allow us to revisit our initial study into the trends and causes of illegitimacy in the city of Nijmegen between 1811 and 1850, a period in which extra-marital fertility peaked not only in Nijmegen but also elsewhere in the Netherlands, and throughout most of Europe. In honor of Theo Engelen, to whom we owe both our fascination with historical demography and our mutual friendship, we will now set out to find new insights into the lives of those who defied social conventions regarding sexuality, courtship and marriage in the city situated on the river Waal. The organization of this chapter is as follows. We will begin by describing the development of illegitimacy in Europe and the Netherlands from the

end of the eighteenth century until the dawn of the twentieth century. Next, we will evaluate how Nijmegen fits into these developments against the backdrop of the city's historical context. After this, we will summarize the scientific debate concerning the rise of illegitimacy during the first half of the nineteenth century. Then we will present basic descriptive analyses for different aspects of illegitimacy. Finally we will draw some tentative conclusions and formulate suggestions about how this line of research can be continued in the future.

## 1. HISTORICAL CONTEXT

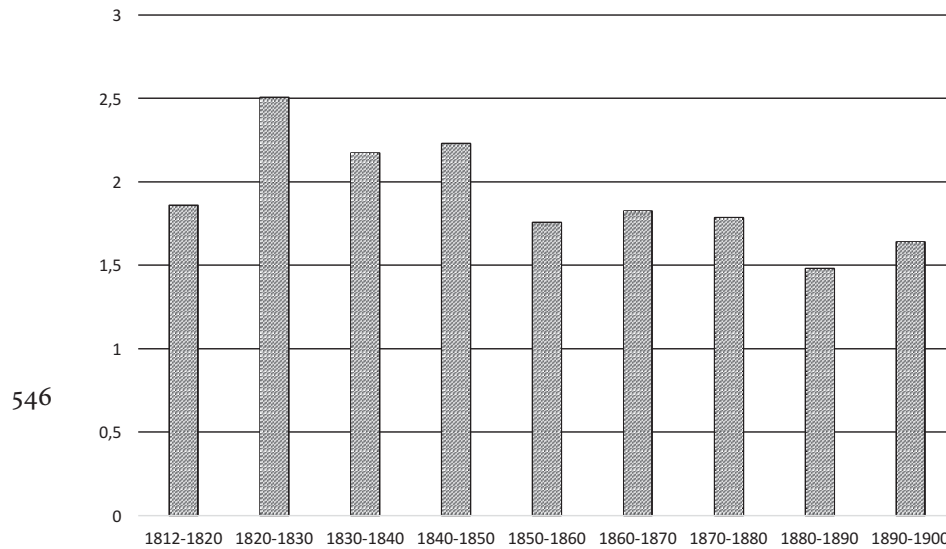
### 1.1 THE RISE AND DECLINE OF ILLEGITIMACY, CA. 1780-1900

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During the latter part of the eighteenth century, a rise in extra-marital fertility occurred in various European countries. Illegitimacy reached its peak during the first half of the nineteenth century. After 1850, extra-marital fertility started to decline again throughout the continent. Although this trend is observable for most of Europe, there were large national, regional and even local differences in the proportion of births occurring out of wedlock. The highest levels were reported in the capital cities of Vienna, where in the 1840s and 1850s almost half of all children were born out of wedlock, and Stockholm, where some four out of ten births were illegitimate (Matovic, 1986). Although illegitimacy was usually considerably higher in cities than in the countryside, there were also rural regions with very high levels of extra-marital fertility, such as Carinthia, Austria. In this region, just over 40% of all children were still being born out of wedlock at the turn of the twentieth century. In contrast, in neighboring rural Tyrol only approximately seven out of one hundred births were illegitimate (Kok, 2005). Even though illegitimacy started to decline during the second half of the nineteenth century in most European countries, there was no return to the particularly low levels of the period prior to 1750 (Shorter, Knodel & Van de Walle, 1971).

The Netherlands was amongst the countries with the lowest illegitimacy levels in Europe (Kok, Van Poppel & Kruse, 1997). As Graph 1 shows, the percentage of illegitimate births stayed well below three per cent for the Netherlands as a whole throughout the nineteenth century. During the 1820s, the percentage of births out of wedlock reached its peak of 2.5% and

Graph 1. *Illegitimate births as a percentage of total live births (n=63,146), the Netherlands.*



Source: HSN release Civil Certificates 2017\_01.

during the latter half of the nineteenth century the percentage of illegitimate births never exceeded two per cent. However, certain provinces and cities deviated considerably from the national average. For instance, the figures for the province of Noord-Holland show an increase from the 1780s onwards, reaching on average a maximum of 8% in the medium-sized urban centers of Alkmaar, Edam, Enkhuizen, Haarlem, Den Helder, Hilversum, Hoorn, Medemblik, Purmerend and Zaandam in the 1820s, after which a gradual decline set in (Kok, 1993). A similar trend has been observed for Amsterdam, although its levels reached a considerably higher peak of 18% (Hofstee, 1981). To a large extent, illegitimacy in the Netherlands followed the European trend, although the decline set in earlier. In Austria, for instance, illegitimacy levels did not begin to decline until the 1870s (Mitterauer & Sieder, 1985). Moreover, extra-marital fertility reached such low levels in the Netherlands by the turn of the century that the country earned itself the reputation of being Europe's 'moral nation' (Kok, 1991).



The French occupation had imposed a heavy burden on the military stronghold of Nijmegen at the beginning of the nineteenth century. Heavy taxes and excessive military costs left the city destitute when the French forces abandoned Nijmegen in 1814. The only beneficial legacy left to Nijmegen was the efficient bureaucratic and legal system that the French had introduced when the Netherlands became part of the Napoleonic empire (Jansma & Schroor, 1991). The city struggled for decades to overcome the socio-economic wounds inflicted by the French. In the 1810s and 1820s, prices of basic resources soared, as did unemployment levels within the city borders. The city's economy depended heavily on the local market and agriculture, and lacked sufficient new economic impulses during the first half of the nineteenth century. The majority of Nijmegen's districts consisted of dilapidated housing; the streets doubled as open sewers and many of the city's residents lived in extreme poverty. Nijmegen regularly witnessed outbreaks of infectious diseases: smallpox in 1820 and 1850 and cholera in 1832 (Buylickx, 1986). The poorer and predominantly Roman Catholic inhabitants particularly suffered; although the majority of the population were Roman Catholics, the city's elite was largely made up of Protestants. This in turn led to religious tensions within the city, which only abated after the 1848 constitution gave more Roman Catholic men the vote and thus slowly promoted emancipation amongst Nijmegen's Roman Catholic population.

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Due to its status as a garrison town, the military played a considerable role in the daily life of Nijmegen. In 1830, war was on the horizon as the southern half of the Netherlands sought its independence during the Belgian Revolution. A large part of the nearby province of Limburg rallied to the Belgian cause, which led the authorities to declare a state of war in Nijmegen (Pikkemaat, 1988). This lasted until 1839, when the Netherlands finally albeit reluctantly, acknowledged the independent kingdom of Belgium. The subsequent departure of the majority of soldiers meant another setback for the city's economy (Klep, 2005), as the local taverns, pubs, brothels and other businesses had thrived on the presence of so many military men. However, Nijmegen kept its official designation as fortified town, which meant that any expansion outside the walls was prohibited. As the population slowly increased from about 13,000 inhabitants at the start of the nineteenth century to approximately 20,000 around 1850, the city walls became an increasingly restrictive impediment to Nijmegen's social, econ-

omic and demographic development since the city was too small to house a population larger than 15,000 people (Engelen, 2005). This situation would not change until 1874, when an official decree from the Ministry of War ended Nijmegen's fortified city status and permitted the demolition of its walls. It heralded an entirely new era for the city by the river Waal.

## 2. HISTORIOGRAPHY

548 Although the historical phenomenon of extra-marital fertility has often been associated with illicit love and prostitution in particular, the scholarly literature on the subject has identified a wide range of potential causes for the observed rise in illegitimacy from the latter half of the eighteenth century onwards. Most authors seem to agree that a multitude of factors contributed to the upward trend in illegitimacy and that simple monocausal arguments cannot sufficiently explain the complex historical reality.

What we know is that non-marital fertility was something which was almost exclusively found among the working classes, and it is therefore not surprising that several authors have pointed to the role of industrialization and urbanization. For Edward Shorter (1971; 1973), the rise of extra-marital fertility signified an early sexual revolution among laboring women. Whereas in the proto-industrial period women had been working with their fathers and husbands within the home to earn a family income, through the rise of wage labor in the industrial sector they had been able to earn an individual wage outside the walls of the family home – and often away from the controlling eyes of relatives – from an early age. According to Shorter, this would have had a liberating effect on them. More economic independence led these women to act more freely in the domain of love and sexuality. In urban areas, a new subculture of young people arose, in which both married and unmarried women had much more sexual intercourse than previously had been the case. Consequently, extra-marital fertility increased. This was only counteracted in the second half of the nineteenth century, with the introduction of contraceptive measures.

The historians Tilly, Scott and Cohen (1976) were among the first to criticize the idea of an early nineteenth-century sexual revolution. They argue that instead of liberating women, the industrial revolution made uneducated women from the lower social classes more vulnerable. Women's wages declined and were considerably lower than men's, and even the opportunities for employment had declined during the early nineteenth cen-



tury. In order to decrease the financial burden of their parents, women left the parental household early and moved to cities, where they started to work mostly as domestic servants and seamstresses. Their wages were, however, too low to support themselves, and they often lived a lonely life in the urban environment. Their vulnerable economic position led them to find a partner and form a stable union. With that aim in mind, they engaged in sexual relationships in anticipation of marriage, just as earlier generations of young women had done. Yet the new generation of men was much more likely to break a marriage promise, mainly due to economic challenges. For the same reason, an increasing number of couples decided to cohabit instead of marrying. This allowed them to avoid the costs involved in contracting an official marriage. Tilly, Scott and Cohen account for the decline of illegitimacy in the latter half of the nineteenth century mainly by pointing to the improved economic conditions.

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David Levine's work (1977) links increasing levels of illegitimacy to the economic uncertainty faced by many women. The growing world economy led to worse labor prospects for women. According to Levine, extra-marital fertility increased in times of economic uncertainty and hardship as the prospects of marriage declined. Couples would postpone their marriages in anticipation of improved economic circumstances, but would not abstain from intercourse, thus facilitating the births of illegitimate children. According to Levine, a child born out of wedlock was the product of a *marriage frustrated* rather than of a single woman desperately trying to form a union with a man through pregnancy.

Peter Laslett's (1980) explanation for increasing illegitimacy moves beyond poor economic circumstances and focuses on the relatively large number of women who had given birth to multiple illegitimate children. Unwed mothers formed their own social network and often were even related to one another, thus constituting their own subculture or *bastardy-prone sub-society*. Within this subculture, illegitimacy, prostitution as a way to earn an income, and overall deviancy from the contemporary sexual norms were normalized. Its members were mostly from the lowest classes. Both men and women within the subculture often produced several illegitimate children and were thus considered *repeaters*. As overall fertility rose, fertility among the women of the bastardy-prone sub-society increased at a faster rate, accounting for the rise in illegitimacy (Laslett & Oosterveen, 1973).

Jan Kok (1991; 1993; 2005) also points to the role of the social network, but from a completely different perspective. He underlines the fact that

550 pre-marital sexuality had long been part and parcel of North-Western European marriage customs; known as ‘bundling’ in Scotland, ‘*fensterln*’ in Germany and ‘*kweesten*’ in the Netherlands. What these and other related customs had in common was that village boys – not strangers – were permitted to have sexual contact with marriageable girls, even without an official engagement, under the watchful and approving eyes of parents, peers and other villagers. In the event of a girl becoming pregnant, her family and other witnesses would hold the young man to his responsibility to marry her. Indeed, these customs always ensured a kind of commitment towards a potential marriage, and, according to Mitterauer (1983), it was also a way of testing a young woman’s fecundity. While these pre-marital sexual customs did not lead to a large number of children born out of wedlock in pre-modern times, things changed with modernization. Kok (2005) explains this by the breakdown of contemporary social control systems, through which it became easier for young men to escape their marriage commitments after their intended brides had fallen pregnant.

### 3. SOURCES AND METHODS

The civil registers were a way for contemporary authorities to gauge the development of the local population. Today, they offer us an insight into its moral behavior towards marriage and sexuality. In 1811, the French *Code Civil* was introduced in the Netherlands. From that point onwards, local authorities were obliged to register all births, marriages, divorces, and deaths. To ensure that registration was carried out according to uniform standards, the central administration issued a manual to instruct local officials how to record these life events. However, not all civil servants respected the official guidelines. Moreover, the compulsory nature of this new form of registration proved to be quite difficult for the public. For instance, people had to register a new-born baby within three days of the actual birth under pain of a fine. However, a comparison of baptismal records and civil birth registers shows that many parents neglected to register the birth of a child during the initial stages of the civil registry (Noordam, 1986). Ultimately, the French system was replaced by the Dutch civil code in 1838.

We have used the birth registry as a starting point, in both physical form in the Regionaal Archief Nijmegen (Regional Archives of Nijmegen) and digitized form. We have looked at all births where the word ‘*onge-*

*huwd* (unmarried) was added after the mother's name in cases where the father happened to be unknown (*N.N.*) or where the word '*buitenechtelijk*' (out of wedlock) had been added to the names of the child's parents in the birth certificate. According to the civil code, a child was illegitimate if it had not been conceived and born within matrimony, the latter meaning a civil marriage. In cases where a child was the product of adultery and the mother was married, the child was considered to be the legitimate child of her husband. We have measured illegitimacy as the illegitimacy ratio, i.e. illegitimate births as a percentage of all live births in Nijmegen in the period between 1811 and 1850. The total number of live births was derived from the Historical Database Dutch Municipalities (HDNG) (Boonstra et al., 2003).

The data on legitimizations was based on the additional information written down by the civil registrar in the margins of birth certificates. We have then used the national digitized civil registries to find more information for the years 1827 and 1850, as a more detailed sample of all the illegitimate births between 1811 and 1850.<sup>3</sup> Since illegitimacy reached its peak in Nijmegen during the 1820s, we have chosen 1827 as our first detailed sample year. This specific year coincides with the city's second attempt to compile a comprehensive population register, detailing the addresses, household structures and professions of its people. Since the level of illegitimate births declined rapidly both in Nijmegen and the Netherlands after 1850, we have chosen 1850 as our second sample year. We have used Nijmegen's digitized population register to find information on the home addresses of all families with children born out of wedlock in 1827 and 1850.<sup>4</sup>

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#### 4. COURTSHIP, MARRIAGE AND ILLEGITIMACY

##### 4.1 ILLEGITIMACY AND MARRIAGE

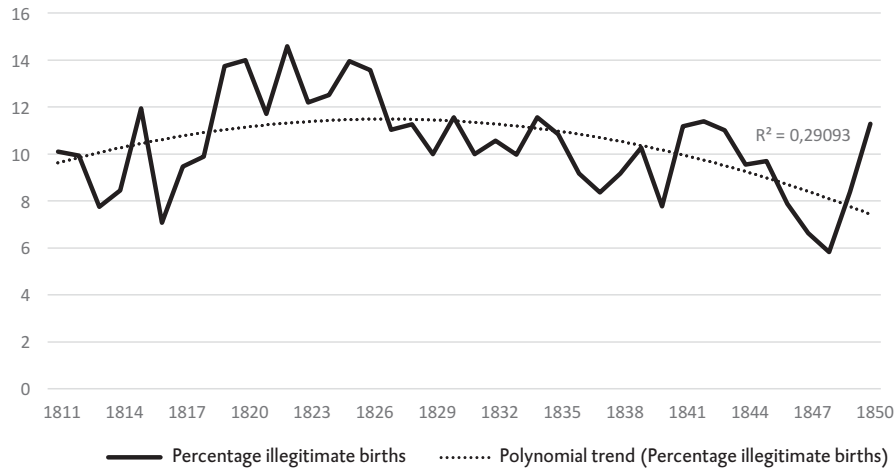
As was explained earlier, illegitimacy increased in Nijmegen, and in the Netherlands generally, between 1750 and 1850. Graph 2 shows that illegitimacy in Nijmegen fluctuated quite considerably from year to year, but the polynomial trend line does indeed suggest an upward trend until the 1820s, followed by a decline, and a brief increase in the early 1840s and again in 1850. The trend of increase followed by decline, which has been observed for other parts of Europe, and for the Netherlands as a whole,

obviously fits the case of Nijmegen as well. In fact, research on other Dutch cities shows similar results. In Utrecht, illegitimacy increased until 1825, reaching its peak with 17% in 1822 (Sterk, 1987). For the garrison towns of Breda and 's-Hertogenbosch, the proportion of children born out of wedlock peaked between 1821 and 1825 at 16.7% and 17.2%, respectively. This was considerably higher than that of the neighboring city of Tilburg, where illegitimacy peaked at nine per cent during the 1830s (Vermunt, 1965). In The Hague, illegitimacy reached its maximum in 1822 with 17% of all children being born out of wedlock (Stokvis, 1986). The illegitimacy ratio that we see in Nijmegen during the 1820s is quite similar to that of Amsterdam in the 1820s. Compared to cities such as Vienna, Stockholm and Paris, the percentage of children born out of wedlock in Nijmegen was not really shocking, but by Dutch standards it was relatively high, considerably above that of the medium-sized urban areas of Holland and far above the national average.

Nijmegen has proved to be a typical example of the Western European marriage pattern. The average age at first marriage was 27.4 years for women during the nineteenth century (Engelen & Hsieh, 2007). As the overpopulation within the city walls increased, the marriage restrictions in place intensified, and the average age at marriage went up accordingly. Although there were no significant differences in the average age at marriage between Roman Catholics and Protestants, there were considerable differences between the various socio-economic strata of the Nijmegen population; the lowest average age of 26 years was found amongst proletarian brides, against an average of 27.4 years amongst skilled laborers and 27.1 years amongst middle class brides. For farmers, economic independence was harder to obtain, as the average age at marriage for agricultural brides of 29.3 years demonstrates (Engelen, 2014). In general, people in Nijmegen married earlier in prosperous times and later when economic circumstances were tougher.

Stricter marriage restrictions as a consequence of negative economic development did not necessarily mean young unmarried couples were more inclined to deviate from the societal norms concerning marriage and fertility. Laslett's *courtship intensity model* (1980) sheds light on this phenomenon: as the prospects of marriage improved, courtship amongst young unmarried people intensified; yet courtship and premarital sexuality did not always lead to actual marriage, which explains why illegitimacy increased in times when marriage prospects improved. Although Graph 3

Graph 2. Illegitimacy ratio in Nijmegen, 1811-1850.

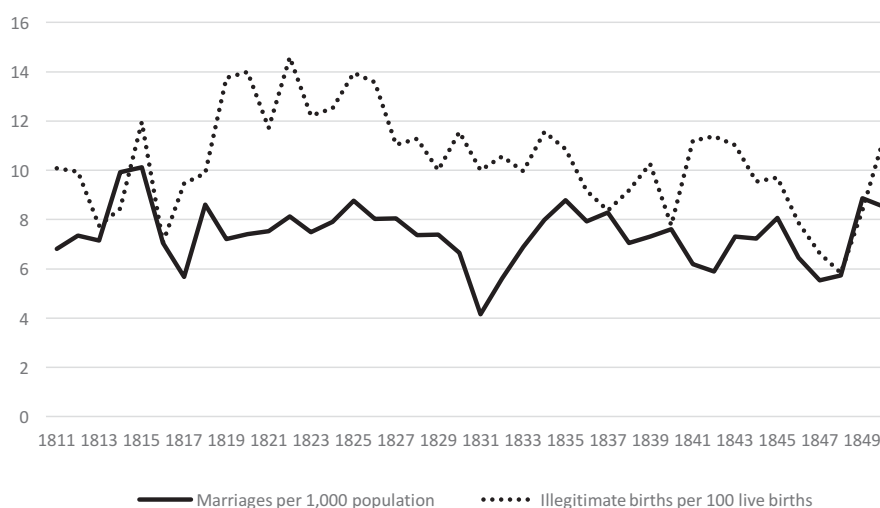


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Source: Birth registers 1811-1850, Regionaal Archief Nijmegen.

shows that trends in marriage and illegitimacy in Nijmegen between 1811 and 1850 did not run perfectly parallel, there was indeed a positive correlation between the two ( $R=0.259$ ). This indicates that increasing rates of marriage, reflecting improved economic opportunities, coincided with an increase in the illegitimacy ratio in Nijmegen, which makes David Levine's (1977) conclusion that increasing rates of illegitimacy were a result of frustrated marriages rather unlikely. After all, Levine's argument suggests a negative relationship between marriage rates and illegitimacy, while we find a positive relationship. The same result also makes it unlikely that rises in extra-marital fertility were the result of young people purposefully violating social norms around sexuality, as suggested by Shorter (1971). After all, the positive relationship between marriage rates and illegitimacy suggests that pre-marital intercourse took place in anticipation of marriage, which can hardly be defined as revolutionary.

Graph 3. Crude marriage rate and illegitimacy ratio in Nijmegen, 1811-1850.



Source: Birth registers 1811-1850, Regionaal Archief Nijmegen; Historical Database of Dutch Municipalities (hdng) (Boonstra et al., 2003).

#### 4.2 BRIDAL PREGNANCY, AGE AT BIRTH AND LEGITIMIZATION

The fact that premarital sex was mainly intended to end in marriage can also be inferred from the relatively high proportion of bridal pregnancies. How one should determine, on the basis of marriage and birth dates, what should be considered a bridal pregnancy is not self-evident. We do not want to include couples who did indeed abstain until after their marriage, as social rules dictated, but whose first child was born prematurely. The great majority of live births occur within a gestation period of between 35 and 40 weeks (Engelen, 2014). A child born between seven and nine months after marriage could have been conceived in the period of intended marriage. That is why we only consider births occurring within the period of seven months following the wedding as proof of a bridal pregnancy. Naturally, this means that we will have omitted a number of bridal pregnancies; this includes those that ended in a miscarriage, but otherwise we will have included women who were not pregnant at the time of the wedding, but who gave birth prematurely.

In Table 1, the number of bridal pregnancies per decade is presented as a percentage of all marriages, for which a first birth was found in the local



civil registers. For this reason, marriages of couples who migrated out of the city directly after marriage, as well as sterile couples, are excluded. During the nineteenth century, about a fifth of all brides in Nijmegen were pregnant at marriage. In the Dutch countryside, the proportion of bridal pregnancies was slightly lower, mainly because the stricter social control in rural areas obstructed premarital sexuality more successfully than in urban areas (Engelen & Meyer, 1979; Engelen & Hillebrand, 1985). In Nijmegen, bridal pregnancies, just like births out of wedlock, occurred disproportionately amongst laborers and proletarians and to a far lesser extent amongst farmers and the lower- and upper-middle class (Engelen, 2014). This need not surprise us, as the middle class was in fact the central bearer of contemporary chastity norms, and middle-class people at the time viewed sexual restraint as the ultimate proof of self-control (Van Ussel, 1982).

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It is seemingly intuitive to assume that an increase in illegitimacy would occur when bridal pregnancies were on the decline. Yet in Noord-Holland, the trend in illegitimacy paralleled that of bridal pregnancies (Kok, 1991). Table 1 shows that, by and large, the same applies to Nijmegen, suggesting that bridal pregnancies and illegitimate births were two sides of the same coin and that one did not compensate for the other. Decreases in bridal pregnancies did not lead to higher illegitimacy, but rather to lower ones. This makes it likely that the decision on whether or not to marry in cases of pre-marital conception was determined by other factors than those which affected the rates of pre-marital sex.

*Table 1. The proportion of bridal pregnancy and illegitimacy in Nijmegen, 1821-1890.*

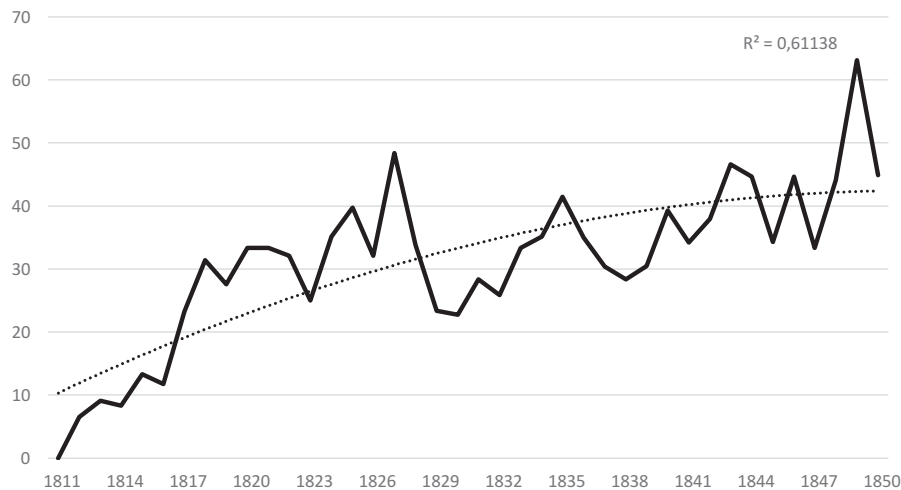
Period	Marriages	Births within 7 months after marriage		Illegitimate births
	N	N	Percentage	Percentage
1821-1830	637	152	23.9	12.3
1831-1840	744	176	23.7	9.7
1841-1850	836	189	22.6	9.4
1851-1860	862	154	17.9	7.4
1861-1870	1064	229	21.5	7.5
1871-1880	1098	215	19.6	5.4
1881-1890	1178	290	24.6	3.4
1821-1890	6419	1405	21.9	7.9

Source: Engelen & Hsieh, 2007, p. 87; Birth registers 1811-1850, Regionaal Archief Nijmegen

The age at marriage is a key mechanism within the Western European marriage pattern, and the age of pregnant brides can serve as another indication of whether couples willingly deviated from social standards by forcing a marriage by means of pregnancy or whether the pregnancy was caused by anticipating marriage. In other words, to what extent can forced marriages be considered to be premature marriages? In Noord-Holland, pregnant brides tended to be slightly younger between 1815 and 1834, with their average age at marriage being 24.6 years against 25.1 years amongst non-pregnant brides (Kok, 1991). For Nijmegen, this difference was only marginally larger during the first half of the nineteenth century. After 1850, the age difference between pregnant brides and their non-pregnant peers started to increase. Throughout the century, the age at marriage of pregnant brides averaged 25.7 years against 27.5 years amongst non-pregnant brides (Engelen & Hsieh, 2007). Moreover, the changes in the average age at marriage between the two groups largely followed the same trend throughout the century, which suggests that bridal pregnancies generally did not pose an intentional threat to the social rules concerning marriage and sexuality. In 1827, the average age of the mother at first birth was slightly higher than that of pregnant brides and lower than that of non-pregnant brides at 26.3 years, based on the 25 women out of 62 whose age we could actually find in the local population and civil registers. For 1850, of the 78 children born out of wedlock, we could find the age of 50 unmarried mothers in the population registers, of whom 11 had previously had children. The average age at first birth amongst single mothers in 1850 was 26.1 years. These results suggest that even single mothers did not necessarily undermine the functioning of Nijmegen's marriage restrictions.

The relatively high proportion of legitimizations, displayed in Graph 4 for the period 1811-1850, is another indication that pre-marital sexuality in Nijmegen was mainly a prelude to marriage. Over the entire period, over a third of all children born out of wedlock were legitimized later in life when their mother and/or father married. Furthermore, a growing number of children born out of wedlock were legitimized over time. This might have been the result of economic improvement during the 1830s, however small this improvement was (Klep, 2005), as it allowed those who had been unable to cover the costs of the wedding before the birth of a child to marry at a later stage in life. This trend might also reflect that concubinage as a long-term strategy was on the decline, and that marriage increasingly became the social norm over time. This last interpretation would be in line with the international literature (Coontz, 2014), but we

*Graph 4. Percentages of legitimizations per 100 live births out of wedlock in Nijmegen, 1811-1850*



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Source: Birth registers 1811-1850, Regionaal Archief Nijmegen

have to be careful. After all, the upward trend might also have been affected by many other factors, such as declining infant and child mortality. As more infants and children survived, the likelihood that a child would be legitimized at some point in time clearly increased. Last but not least, certain people were legally barred from marriage; a group of people who to a large extent were responsible for the relatively high levels of illegitimacy. We turn our attention to this group in the following paragraph.

## 5. CHILDREN OF THE GARRISON

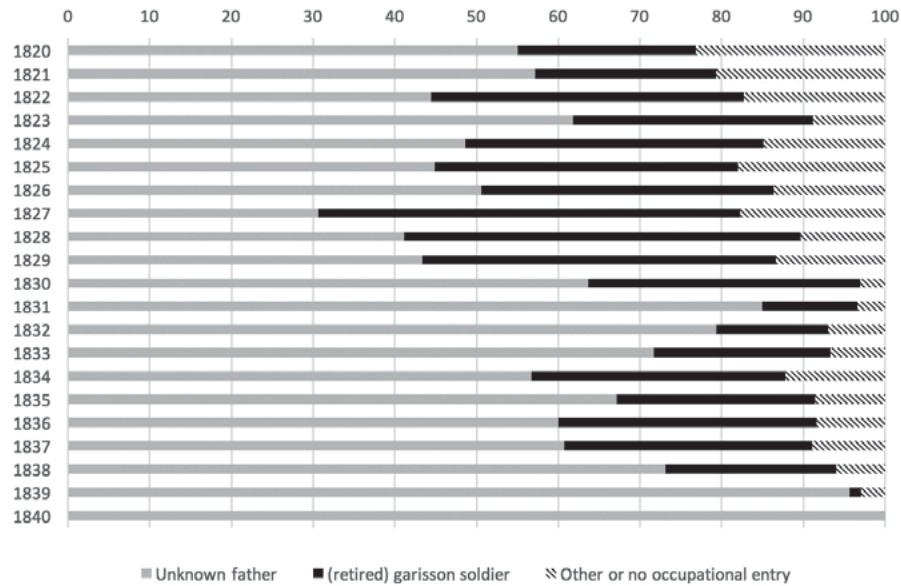
The introduction of the French Code Civil weakened the legal position of single mothers, as paternity actions were abolished under the new law. These actions had enabled unmarried mothers to legally oblige the begetter of their illegitimate child to either marry them or to pay for the child's maintenance (Damsma, 1999). Yet the lack of this legislative instrument seemingly did not disadvantage many single mothers in Nijmegen, as a considerable number of unmarried men openly admitted to the local civil servant that they had fathered an illegitimate child, as becomes clear

in Graph 5; over 40% of all illegitimate births during the 1820s and 1830s were declared by the child's father himself. Concubinage was no longer a criminal offence in the Code Civil, and although most couples had not been prosecuted before this time, this change meant that there was no longer a legal obstacle to unmarried couples living together (Kok, 1991).

558 Looking at Graph 5, it immediately becomes clear that a considerable portion of these fathers were actually enlisted in, or retired from, the city's garrison, based on the profession that the city registrar had written down on the child's birth certificate. The garrison played a substantial role in Nijmegen's daily life until well into the twentieth century. Due to the city's garrison town status during the first half of the nineteenth century, fortifications could not be altered in any way and no buildings were allowed within range of the city. The soldiers were housed within the city walls, and, due to their numbers, found accommodation not only in the local barracks, but also in the city's convents and houses (Nabuurs, 2009). Nijmegen's pubs, taverns and brothels, often located in the poorer lower city districts, thrived due to the garrison. Moreover, the rise of illegitimacy can, at least in part, be attributed to the presence of so many, often unmarried, soldiers. In Nijmegen, the garrison increased from 700 to 2,400 soldiers in the period between 1830 and 1839 (Klep, 2005). In Tilburg and 's-Hertogenbosch, the deployment of the garrison during the Belgian Revolution caused a rise in illegitimacy as more soldiers were housed within the two cities (Vermunt, 1965). The same seems to have been the case for Nijmegen.

However, most soldiers were barred from marriage. In 1795, a decree was issued stating that only soldiers who had served more than six years could marry. Officers could apply for an official exception, but many requests were still refused. In 1808, another decree ruled that only one-fifth of all captains and one-eighth of all first lieutenants could receive a dispensation to be married. Lower officers were completely prohibited from marrying. Any violation of these rules would be punished by discharge. Nevertheless, this did not necessarily prevent soldiers from forming a family of their own in concubinage (Kok, 1991); their partners and children would reside in the vicinity of the barracks and followed them as they were deployed elsewhere. All things considered, the prohibition on marrying seemed to have evolved into an acceptance of concubinage for some (retired) soldiers.

Graph 5. Relative distribution of illegitimate births by (1) unknown father, (2) father known, (retired) garrison soldier (3) father known with other or no occupational entry



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Source: Birth registers 1820-1840, Regionaal Archief Nijmegen.

In Nijmegen, an overwhelming proportion of illegitimate children with a known father can be attributed to (retired) garrison soldiers, particularly in the period between 1820 and 1839 as the number of soldiers stationed within Nijmegen increased drastically. The bulk of the troops left after 1839, which might explain the steep decline in the percentage of illegitimate children with their father's name on their birth certificate. Of all 409 children fathered by (retired) garrison soldiers, the father did eventually marry the mother of their illegitimate child or children in 173 cases. We do certainly find traces of soldiers living in concubinage in Nijmegen, as the couple we introduced earlier on, Daniel Grimberg and Theodora Derksen, illustrate. Nonetheless, it remains unclear whether this concubinage was a result of legislative, social, economic or political obstacles keeping them from marrying or whether it was rather a form of deliberate deviance from social norms.

## 6. SEASONALITY OF ILLEGITIMACY

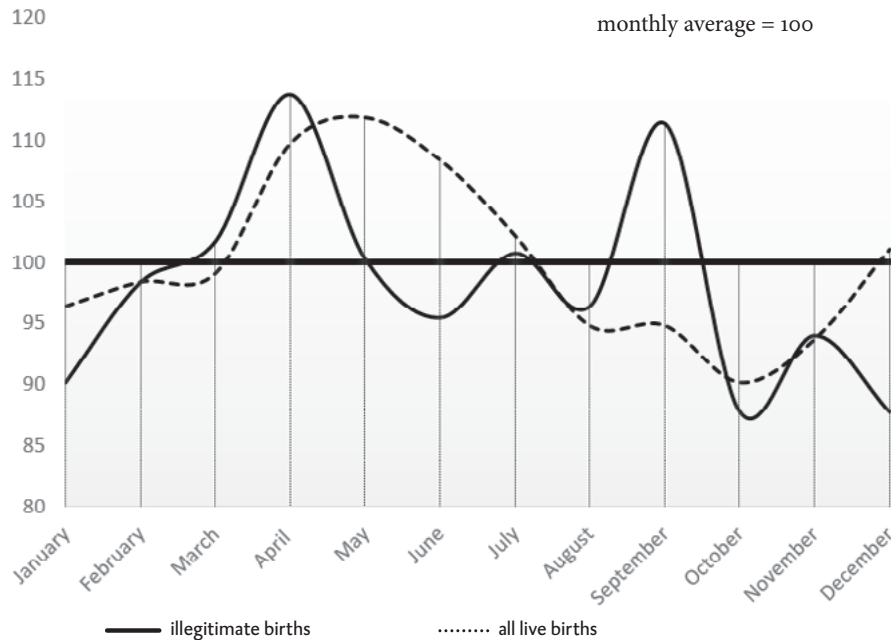
Another way of acquiring insight into the phenomenon of illegitimacy is by exploring seasonality patterns in extra-marital conceptions. Across societies there are clear fluctuations in live births, both in and outside of marriage, over the course of the year. This has, amongst other things, to do with climatological factors, work patterns, and cultural regulations and practices around marriage and sexuality (Engelen & Lin, 2011). When it comes to climate, high temperatures for instance discourage sexual activity, while at the same time, it has a negative impact on spermatogenesis. Very low temperatures also have a negative impact on fertility (Ruiu & Breschi, 2017). Furthermore, it has been shown that conceptions drop at times of intensive work, which for instance was the case in eighteenth- and nineteenth-century German villages during harvest times (Knodel, 1988). Moreover, the Church might have had an impact, by discouraging or prohibiting sexual activity during certain periods such as Lent (Engelen, 2018). Last, but not least, marriage seasonality had an important impact on birth seasonality since the date of marriage was closely related to that of first sexual intercourse (Ruiu & Breschi, 2017). In Nijmegen, just as in the rest of the Netherlands (except for Limburg), May was the favorite month for weddings, and there were clear dips in March and December, due to the fact that contracting a marriage was forbidden by the Church during Lent and Advent (Engelen, 2017; 2018).

While all the aforementioned factors affected all live births in principle, there were also factors that were of special concern to the seasonality of births out of wedlock and bridal pregnancies. These are mostly related to events, which allowed young people to meet and date each other and which increased the risk of engaging in pre-marital sexual activity. In the nineteenth-century, such opportunities for young people from the higher social classes were few, since they were continuously chaperoned, but the laboring classes enjoyed much more freedom from their parents. The ideal occasions for dating were local fairs and dance parties (Kok, Bras & Rotering, 2016). As these were organized at different dates throughout the country, such occasions would not lead to spikes in extra-marital conceptions at the regional or national level, but they might present themselves very clearly at the local level.

Graph 6 shows the seasonality in conceptions for all live-born children, as well as separately for those children born out of wedlock, in Nijmegen in the period between 1811 and 1850. The estimated conception months



Graph 6. Seasonality of conceptions of illegitimate births and of all live births, 1811-1850



Source: Birth registers 1811-1850, Regionaal Archief Nijmegen.

have been determined by deducting 280 days from the birth date and taking the month in which the resulting date occurs. The number of conceptions is expressed for each month as an index number of the average number of conceptions per month throughout the whole research period; the figure has been adjusted for the number of days per month, and the lines in the graph have been smoothed. Unfortunately the data did not allow us to make a distinction between first and subsequent births.

Graph 6 shows us some clear patterns. For all live births a peak was reached in May, which coincided with a strong marriage peak: one in five marriages in Nijmegen in the period 1811-1850 were contracted in May (cf. Engelen, 2018). This underlines the fact that marriage, sexual intercourse and conception were strongly interconnected. Although the picture might be blurred by the fact that second and subsequent births are included, it is quite likely that the number of conceptions in the month of June were also above average, since for some of the newly-married couples a few weeks would have elapsed before sexual activity led to conception. If we continue this line of reasoning and combine it with what we know about

courtship rituals in the nineteenth-century Netherlands, the fact that the highest number of live births occurred in April is, at least in part, due to the fact that many couples began to have sexual intercourse before marriage, resulting in bridal pregnancies.

562 If we bear this information in mind when looking at the seasonality of conceptions of babies who were born out of wedlock, we see some interesting similarities and differences. The conceptions of children who were ultimately born out of wedlock peaks strongly in April. This suggests that these couples had intercourse in anticipation of a marriage in May, which then did not take place. The upward trend in conceptions in early spring is very much the same as for all live births, but the peak is reached earlier and the subsequent downward trend sets in earlier and faster. As was the case with bridal pregnancies, these couples had sex ahead of marriage, but they either canceled or never went through with their weddings. One potential reason for this is that the men lost their jobs. Traditionally, many couples in the Netherlands chose to marry in May, because that was the time when labor contracts and leases were renewed (Van Poppel, 1995). However, this also meant that some did not have their contracts renewed and that they did not find a new job immediately. In turn, couples decided to postpone or abstain from marriage, and this decision might have been taken at a point when the couple was not yet aware of the pregnancy. This underlines Levine's (1977) point about frustrated marriages, but this picture does not fit all conceptions.

The peak in conceptions of illegitimate children in September is also very striking, but very different in nature from the one in April, since it accompanied a clear dip in all live births. This deviation leads us to believe that these conceptions were much less targeted towards marriage, and were rather the result of sexual contact between individuals who did not have a stable relationship. This reasoning is supported by the fact that September was the month in which Nijmegen's annual fair was held. In both the city as in the rest of the Netherlands, the fair was the social event of the year for young people, especially from the lower classes. It offered them a chance to dress up, drink, have fun, but also to flirt and meet potential partners either from within the city or from its surrounding region. For some, this obviously would have led to pregnancy.

From October through to January, the number of conceptions – both of all live births and of those born out of wedlock – was considerably below average, which was most likely related to the cold weather, the marriage ban during Advent and the fact that there were less opportunities

for unmarried people to meet each other. The fact that there is no spike at the time of Carnival (prior to the liturgical season of Lent) can be explained by the fact its celebration was prohibited in the first part of the nineteenth century. Finally, it is remarkable that there is no dip in conceptions observed for March, which coincided with Lent. This is all the more remarkable since very few marriages (on average 3% of all yearly marriages) were contracted during this month (cf. Engelen, 2018). Finally, the dip in conceptions for all live births in August, September and October might be related to harvesting, as many young men worked outside of the city walls in the fields.

## 7. A BASTARDY-PRONE SUB-SOCIETY?

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Given the seasonality patterns in extra-marital conceptions described above, we have to consider the possibility that some illegitimate children were the unintended products of sexuality in an age without effective contraceptives. Moreover, the birth of one or more illegitimate children and concubinage might not have been at odds with the social rules for all people in Nijmegen. For Laslett and Oosterveen (1973), the number of illegitimate children in England could be attributed to a disproportionate number of single mothers, indicating that at least some unmarried mothers formed their own subculture in which illegitimacy was socially accepted and passed on from generation to generation. These mothers were often related to each other. Their marriage partner, if they ever found one, was often born out of wedlock himself or had fathered an illegitimate child beforehand. Prostitution was an accepted way to earn an income. The *swallows*, or women who had only borne a single illegitimate child, were only part of this subculture if they were related to other single mothers, in contrast to the *repeaters*, or mothers of multiple illegitimate children (Laslett, 1980).

Yet marriage remained the best way for women to protect their socio-economic position in the long run. It remains questionable whether this bastardy-prone sub-society was due to a true defiance of societal norms regarding sexuality and family formation. Diminishing marriage prospects meant that more women were willing to take greater risks during courtship, hoping that their consent to premarital intercourse would increase their chances of marriage. However, it also meant that more women were abandoned by their intended husbands before their wedding. In other

words, the number of women who had lost out on the marriage market entirely grew substantially in times of economic hardship. Hoping for marriage, they entered into often unsteady relationships, which in turn led to more illegitimate children. Their children may have perpetuated this subculture inclined towards illegitimacy (Kok, 2005). In this sense, the bastardy-prone sub-society was a direct consequence of the Western European marriage pattern; unmarried mothers gravitated towards each other to find their own socio-economic niche within society, as they had little chance of finding themselves a husband.

564 In late eighteenth-century Rotterdam, only about twelve per cent of all unmarried mothers had multiple illegitimate children, and ten per cent of these repeaters did eventually marry, indicating that there was hardly a bastardy-prone sub-society in Rotterdam at the time (Boerdam, 1985). The single mothers of Rotterdam mainly lived in the poorest areas of the city. The same applied to Utrecht in the period between 1775 and 1825 (Sterk, 1987). There were no direct signs of a bastardy-prone sub-society, but both swallows and repeaters lived in the poorest parts of Utrecht. They did not necessarily work as prostitutes, at least not officially. As such, the clustering of single mothers should be interpreted as a sign of poverty rather than proof of a bastardy-prone sub-society.

We have used the population registers to locate the swallows and repeaters in Nijmegen in 1827 and 1850, respectively. Not all of the mothers found in the birth registers actually lived in Nijmegen. Some of them only moved to the city to give birth to their children in the relative anonymity of an urban environment. Moreover, people from the nearby hamlets of Hatert, Neerbosch and Schependom declared their children to the registrar in Nijmegen, although there were separate population registers for these small townships as these areas were located outside of the city walls. For our first sample year, we have found 29 single mothers out of all 62 illegitimate children born that year. For our second sample year, we have located 62 single mothers out of a total of 78 children born out of wedlock in 1850, including one twin. For every mother, we have used both the population registers and the civil registers to find whether these women had given birth to one or more illegitimate children. Furthermore, we have omitted all women whom we could not identify with certainty in the registers. Figures 1 and 2 show all the swallows in green for 1827 and yellow for 1850, and the repeaters are depicted in blue for 1827 and red for 1850, respectively. For 1827, sixteen out of 29 single mothers actually had multiple illegitimate children. Of these sixteen women, nine eventually

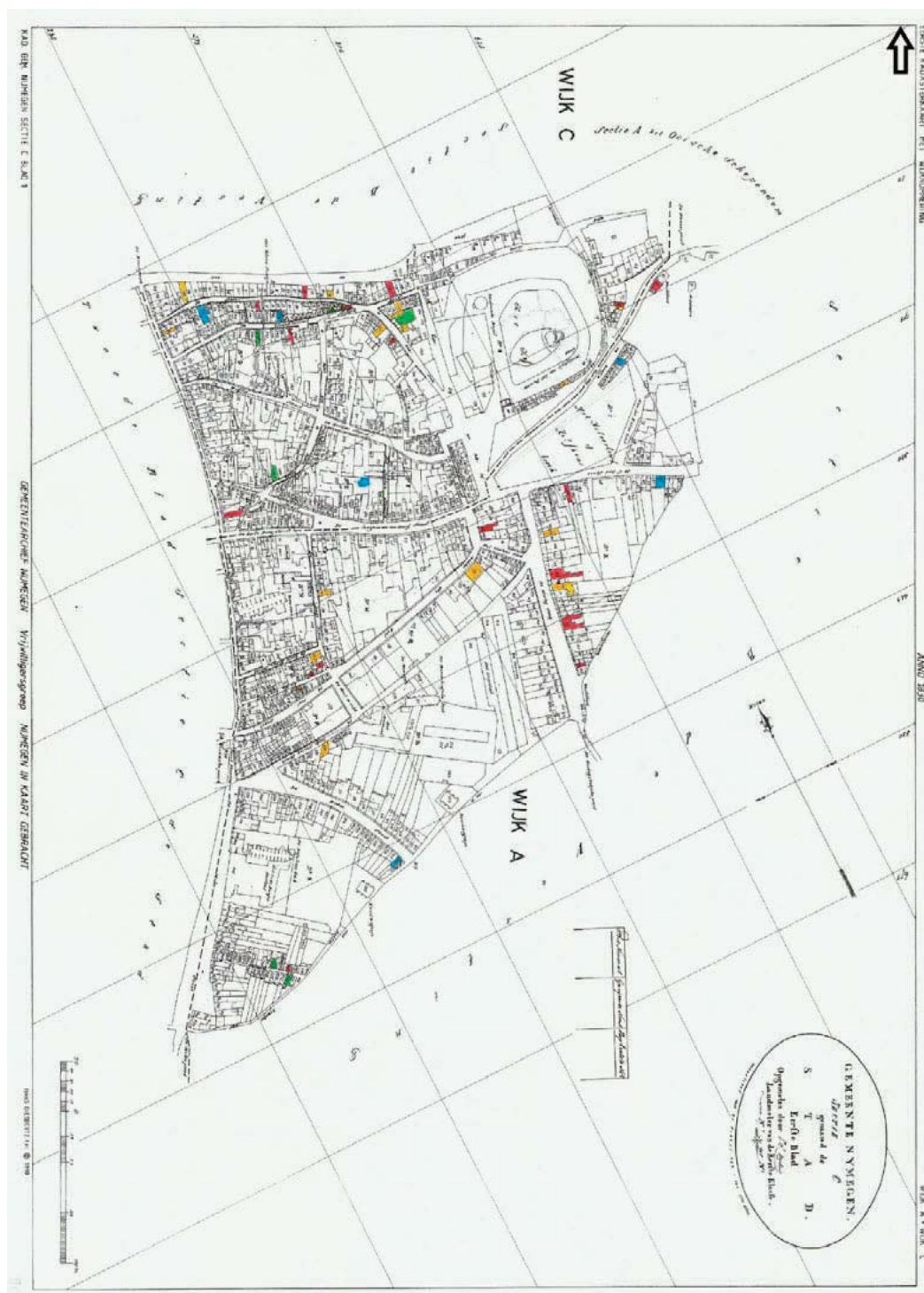
married. The same applied to the thirteen swallows for our first sample year. As for our second sample year, there were 27 repeaters, of whom eleven eventually married. Of the 35 swallows, twenty married later in life. All in all, marriage seems to have remained the ultimate goal in life for both swallows and repeaters, who were aware that it would legitimize their child or children, as well as improving their socio-economic standing.

Maps 1 and 2 show that there seem to have been several clusters of single mothers within the city, which happen to have been located in the poorer parts of Nijmegen. In the western part of town two streets stand out: the Bloemerstraat and the Achter de Wal, located near the city walls. Multiple swallows and repeaters can be found near the military barracks near the Hezelpoort and the Waal, respectively. In the eastern part of the city we see four separate clusters. The first and smaller cluster can be found in the Vlaamse Gas, a narrow alleyway inhabited by the most impoverished people in the city. Swallows and repeaters also clustered in and near the Hertogsteeg, which was in close proximity to military barracks. The largest barracks were located between the Ziekerpoort and the Hertogsteegpoort. Two other barracks were located to the north-east, near the Valkhof area. The third cluster can be seen near the Lange Nieuwstraat, Korte Nieuwstraat, and Op den Grutberg, on the other side of the city barracks. The last cluster can be found in the Steenstraat, Strikstraat, Vleeshouwerstraat and Voerweg. These streets were located near the river and were notorious for their poverty, overcrowding and poor living conditions. Both the Steenstraat and Voerweg housed several taverns. Prostitutes supposedly worked in the areas surrounding the Voerweg and Vleeshouwerstraat, although many women were never officially registered as prostitutes. Even if single mothers did form a subculture of their own – of which only family reconstructions can deliver tangible proof – the clustering of both swallows and repeaters first and foremost shows the connection between the city's garrison and illegitimacy on the one hand, and the often extremely poor conditions single mothers had to live in on the other.

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Map 2. Repeaters (green and yellow) and swallows (blue and red) in the eastern part of Nijmegen in 1827 and 1850. Collection of maps and city plans, KPB-III-40, Eerste kadasterkaart met wijksnummering 1830 by L.C. Maehen, Regionaal Archief Nijmegen.

BORN OUT OF WEDLOCK AT THE RIVER WAAL

## CONCLUSION

Just as was the case elsewhere in the Netherlands and in most other Western European societies, illegitimacy rose and fell in Nijmegen during the first half of the nineteenth century. A peak was reached in the early 1820s when slightly over 14% of all children were born out of wedlock. Compared to the national average, the proportion of births that occurred out of wedlock by the river Waal was high, but it remained far below the levels that have been observed for cities such as Vienna and Stockholm. In Nijmegen and the rest of the Netherlands, illegitimacy remained a marginal phenomenon that did not pose a threat to the Western European marriage pattern.

568 Earlier studies showed that illegitimacy was a predominantly lower-class phenomenon and it was associated with various dimensions of vulnerability. The analysis of the data on Nijmegen permits the assumption that women who gave birth to children out of wedlock were not the precursors of an early sexual revolution as Edward Shorter (1971) has suggested, nor did they form a clear sub-culture with strong deviating sexual norms (cf. Laslett, 1980). Instead, extra-marital sexuality seems to have been predominantly directed toward marriage, or at least the formation of a stable union. Pregnant brides were only slightly younger than non-pregnant brides, which suggests that they had postponed sexual activity until they had reached a marriageable age. This seems to apply even more so to single mothers, as the average age at first birth in our two sample years is slightly higher than that of pregnant brides. Moreover, illegitimacy and bridal pregnancies followed similar trends, which suggests that they were by and large two sides of the same coin. In times when marriage prospects improved, courtship intensified, sexual activity increased, and pre-marital conceptions became more widespread.

A reasonable proportion of couples engaging in pre-marital intercourse did eventually marry. However, others abandoned their partner or postponed marriage. Nevertheless, we also see a strong upward trend in legitimizations during the period under research. Whereas in the early 1810s less than 10% of all children born out of wedlock were eventually legitimized through marriage, about half of them were legitimized by the middle of the century. Although there may have been plenty of reasons why people decided to not proceed with or to postpone their marriage apart from financial motives, the occupational status of the groom seems to have been of key importance. Our analysis shows that a majority of the

known fathers of illegitimate children were (retired) garrison soldiers, of whom the large majority were prohibited by law from marrying. It seems that many of these soldiers chose to cohabit with their partners as a formal marriage was not a legal option to them. It is also very likely that the soldiers contributed to the rise in illegitimacy. Their numbers increased drastically in the 1820s and 1830s due to the state of war, followed by increasing levels of illegitimate births. As their numbers declined after 1839, illegitimacy did so as well.

But why did the other fathers refrain from marrying the mothers of their illegitimate children? Some may have lacked the financial means to do so as their labor contracts were not renewed; others may simply have abandoned their plans to marry. The fact that illegitimate conceptions peaked in September indicates that many of the illegitimate children in Nijmegen were conceived during the annual fair; this event likely offered young people an opportunity to engage in sexual activity with partners with whom they had no stable relationship. Moreover, these people may have been partners whom they themselves, or their family and wider social network, deemed unsuitable as spouses. It is plausible that the unmarried mothers who were abandoned due to a lack of love, commitment and / or money lacked the means and the social network to force the father of their child to marry them. Moreover, the begetter of the illegitimate child may have simply disappeared from the scene after violent sexual contact. Our search in the population registers for the locations of single mothers reveals that a considerable proportion of these women lived in the poorest parts of the city, which substantiates the intimate relationship between economic hardship and illegitimacy even further.

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While we are able to sketch the rough contours of illegitimacy in Nijmegen in the early nineteenth century, further research is necessary to get a better founded picture of the causes and consequences of extra-marital fertility by the river Waal. In order to obtain a more comprehensive picture of the phenomenon, it would be sensible to reconstruct the life courses of single mothers and to systematically compare them with the life courses of other groups of women; women who followed other paths of marriage and family formation. It would also be highly interesting to dig into the life courses of the known fathers of illegitimate children and to compare the fathers who chose to marry their child's mother to those who chose not to.

Once life course data is gathered, multivariate analysis, such as event history analysis, and sequence analysis can be applied. In this way, it can

be investigated further why the lives of single mothers and their sexual partners deviated from the contemporary cultural life scripts regarding marriage and family formation (cf. Engelen, 2014). What factors increased the risk of becoming pregnant before marriage? What influenced the likelihood of a pregnancy ending in marriage compared to single motherhood? What kind of events during the life course increased the likelihood that a single mother ultimately married and, conversely, what factors prevented her from marrying? What happened to the known fathers who did not marry the mothers of their illegitimate children? Did they marry another woman within a short period of time? If the latter was the case, we can reject the idea that a lack of economic means prevented the marriage, unless they married well-off brides instead. This type of research can be supplemented by social network analysis in order to determine whether and how single mothers were related to each other, but it can also help to evaluate to what degree the role of the network influenced eventual outcomes in the family formation process.

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1. Civil Registry Nijmegen, *Registry of Births 1827*, record no. 522, Regionaal Archief Nijmegen.
2. In this paper, we use extra-marital fertility, births out of wedlock, births outside of matrimony, illegitimacy, and non-marital fertility interchangeably, all indicating births of children whose parents were not married at the time of birth.
3. <http://wiewaswie.nl>
4. <http://studiezaal.nijmegen.nl>.